Docket No. 02-0864
ICC Staff Exhibit 31.0

REBUTTAL TESTIMONY

of

MICHAEL McNALLY

FINANCE DEPARTMENT

FINANCIAL ANALYSIS DIVISION

ILLINOIS COMMERCE COMMISSION

ILLINOIS BELL TELEPHONE COMPANY

FILING TO INCREASE UNBUNDLED LOOP AND NONRECURRING RATES

Docket No. 02-0864

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WITNESS IDENTIFICATION

Q. Please state your name and business address.

A. My name is Michael McNally. My business address is 527 East Capitol Avenue, Springfield, IL 62701.

Q. Are you the same Michael McNally who testified previously in this proceeding?

A. Yes, I am.

Q. Please state the purpose of your testimony in this proceeding.

A. The purpose of my testimony is to respond to the rebuttal testimony of Illinois Bell Telephone Company ("SBCI" or the "Company") witness Dr. William E. Avera (SBC Illinois Ex. 12.1).

RESPONSE TO DR. AVERA

Q. Please evaluate Dr. Avera's rebuttal testimony.

A. Dr. Avera's rebuttal testimony is spotted with red herrings and hyperbole. His overarching criticism is that my recommendation does not reflect enough competitive risk. However, the degree of competitive risk reflected in my recommendation is consistent with the degree of efficiency reflected in the other cost components of Staff's unbundled network element ("UNE") loop rates. Moreover, as I will explain below, Dr. Avera's capital structure and cost of debt and equity estimates are flawed. Ultimately, Dr. Avera's rebuttal testimony

contains nothing to change my opinion of the overall cost of capital for the Company's UNE loops. In my judgment, the overall cost of capital for SBCI's UNE loops equals 8.62%.

Competitive Risk Assessment

Q. Dr. Avera claims that your analysis is fundamentally flawed because it does not follow the FCC's directive regarding the level of competitive risk to assume in establishing the cost of capital for UNEs. Is he correct?

A. No. Dr. Avera mischaracterizes the FCC's directives by assigning a level of specificity with respect to competitive risk that the FCC did not provide. Dr. Avera cites two quotes from the FCC that indicate that the cost of capital used in UNE pricing should reflect risks associated with a market in which there is facilities-based competition.[1] However, FCC's vague instruction regarding competitive risk does not precisely describe what level of competitive risk should be assumed, since competitive risk ranges from that of a regulated monopoly to that of perfect competition. Nevertheless, when paraphrasing the FCC's directives Dr. Avera repeatedly inserts prejudicial language that creates the false appearance of FCC support for his argument for a higher cost of capital than Staff recommends. For example, in several instances, Dr. Avera indicates that the FCC requires the cost of capital to reflect "full" competition or a "fully" competitive market.[2] Likewise, Dr. Avera indicates that the FCC requires the cost of capital to reflect "ubiquitous" facilities-based competition.[3] To my knowledge, the FCC has not instructed states to reflect either "full" or "ubiquitous"

[1] SBC Illinois Exhibit 12.1. pp. 4 and 33.
[2] SBC Illinois Exhibit 12.1, pp. 4, 7, 27, and 33.
[3] SBC Illinois Exhibit 12.1, pp. 5 and 13.

facilities-based competition in the cost of capital used to set UNE prices, but has instructed states to reflect an unspecified level of facilities-based competition. Thus, it is unclear precisely how much competitive risk to assume in calculating the cost of capital to be used in setting UNE prices.

Q. How should the cost of capital for UNEs be set, given the FCC's vague directive regarding competitive risk?

A. The ICC's initial comments on the FCC's recent Notice of Proposed Rule Making are instructive. The ICC states:

> The ICC believes that the Commission should, whatever it elects to do, adopt consistent assumptions regarding competition and operating costs. For example, the assumption of a competitive environment would indicate an efficient network, which would produce lower operating costs and lower profit margins, which would increase risk and consequently, increase the cost of capital. In contrast, the assumption of higher operating costs due to a less than efficient network implies a less competitive market, which would produce a lower cost of capital..... Ultimately, whatever level of efficiency, (i.e., competition) the FCC decides to reflect in its operating assumptions will dictate, on a sliding scale, the cost of capital that states should adopt.[4]

These ICC comments indicate that the cost of capital used in any given pricing model should reflect a level of competitive risk consistent with the level of efficiency of the UNE network implied by the other cost factors used in that pricing model. Thus, the cost of capital should reflect full competition only if the other cost factors used in the pricing model reflect a fully efficient network.

[4] *See* Initial Comments of the Illinois Commerce Commission at 58, *Notice of Proposed Rulemaking*, In the Matter of Review of the Commission's Rules Regarding the Pricing of Unbundled Network Elements and the Resale of Service by Incumbent Local Exchange Carriers, FCC No. 03-224, WC Docket No. 03-173 (Adopted: September 10, 2003; Released: September 15, 2003) (hereafter "TELRIC NPRM")

Q. Is the level of competitive risk reflected in your cost of capital recommendation consistent with the level of efficiency of the UNE network implied by the operating costs used in Staff's pricing model?

A. Yes. As indicated in my direct testimony, my cost of capital reflects a level of competitive risk somewhat less than that faced by unregulated industrial companies (i.e., "full" competition). Similarly, the other cost inputs Staff determined to be appropriate for use in LoopCAT reflect a level of efficiency consistent with something less than full competition. Staff witness Jeffrey H. Hoagg states, "Staff has corrected various SBC Illinois departures from TELRIC requirements (to the degree possible given the limitations of SBC Illinois' cost models and methodologies and available information)."[5] The parenthetical phrase concluding that sentence indicates that, despite Staff's best efforts, Staff's inputs reflect a level of efficiency less than that of the TELRIC ideal due to the limitations of the SBC Illinois' cost models and methodologies and available information. Thus, Staff's recommendations for cost of capital and other cost factors reflect less than full competition and are, thus, internally consistent.

Q. Would a cost of capital reflecting full competition be consistent with the level of efficiency of the UNE network implied by the operating costs used in the Company's pricing model?

A. No. Dr. Avera's criticism of my analysis for not reflecting full competition implies that his cost of capital recommendation does reflect full competition. However, a cost of capital reflecting full competition would not be consistent with the level of efficiency implied by the other cost inputs the Company used. As noted above, even after Staff's corrections, the Company's models still do not reflect a level of

[5] ICC Staff Exhibit 1.0, p. 14.

efficiency consistent with full competition. Therefore, it follows that prior to Staff's corrections, the Company's models were even farther from full competitive efficiency. Thus, a cost of capital reflecting full competition would clearly not be consistent with the level of efficiency of the UNE network implied by the operating costs used in the Company's pricing model.

Q. Is the level of competitive risk reflected in the samples that form the bases of your and Dr. Avera's cost of capital recommendations significantly different?

A. No. Although Dr. Avera criticizes of my cost of capital for not reflecting full competition, the samples that form the bases of my and Dr. Avera' cost of capital recommendations both comprise the diversified parents or holding companies of LECs. In fact, his updated analysis was performed on a subset of my Telecom Sample. Thus, the level of competition reflected in his sample does not differ significantly from that reflected in my sample.

Q. If the level of competition reflected in the samples that form the bases of your and Dr. Avera's cost of capital recommendations does not differ significantly, why is there a significant difference in your cost of capital recommendations?

A. The difference is largely due to the challenge of establishing a forward-looking capital structure that cannot be observed. Dr. Avera claims that the higher level of competitive risk he insists the FCC directs us to assume warrants a much more conservative capital structure than I propose. However, as I will explain below, Dr. Avera's capital structure proposal does not reflect an appropriate level of competitive risk. Also, to a lesser extent, the difference between our

recommendations is due to the differences in the inputs we used to determine capital component costs. For example, the difference between my 12.44% cost of equity estimate and his 13.0% estimate is due largely to differences in our growth rate estimates, as explained in my direct testimony and further explained below.

Capital Structure

Q. Dr. Avera claims that "the Commission is charged not with the responsibility of determining a theoretically optimal target capital structure, but rather with establishing a forward-looking capitalization that reflects the risk and requirements inherent with a fully competitive market."[6] Is he correct?

A. No. First, for reasons discussed previously, the cost of capital adopted in this proceeding should not reflect a fully competitive market. Second, the two objectives Dr. Avera presents as conflicting, a theoretically optimal target capital structure and a forward-looking capitalization that reflects the risk and requirements inherent with a competitive market, are not mutually exclusive. One function of regulation is to act as a surrogate for competition. Economic theory suggests that competition will pressure competitors to become more efficient (i.e., market competitors must minimize their costs to succeed).[7] To do so requires a company to raise an optimal mix of capital that minimizes costs.

[6] SBC Illinois Exhibit 12.1, p. 27.
[7] *See* Initial Comments of the Illinois Commerce Commission at 59, TELRIC NPRM.

Q. Dr. Avera notes that the FCC's Wireline Competition Bureau concluded that the theoretically correct capital structure should be based on market values and provides several market value equity ratios as alternative bases for the capital structure. Do market value capital structures provide appropriate targets for the capital structure to be used in this proceeding?

A. Only if those capital structures are based on primary market values. As explained in my direct testimony, there is no difference between the market value and book value of incremental capital issuances (i.e., primary market values) and, consequently, there would be no difference between the market value and book value of a forward-looking capital structure.[8] In raising this issue, Dr. Avera introduces a red herring. The argument he makes on lines 532 through 546 of his rebuttal testimony implies that my capital structure recommendation is based on historical book values capital structures. However, I did not use a historical capital structure as the basis for my capital structure recommendation. In contrast, Dr. Avera's capital structure is based on the year-end 1998 market value capital structure of his LEC Group.[9] Thus, his capital structure is both historical and based on secondary market values, both of which are inappropriate for this proceeding, as I explain below.

The TELRIC methodology is designed to establish an estimate of the mix of **new** capital a facilities-based local exchange carrier would raise in order to buy assets to serve customers. The capital structure may be estimated in three ways: 1) project a hypothetical mix of marginal capital (i.e., capital that has yet to be raised), in which case market and book values will equate, 2) use the book

[8] ICC Staff Exhibit 12.0, p. 41.
[9] SBC Illinois Exhibit 12.1, pp. 6-7.

values of capital already invested in company assets, or 3) use the secondary market values of capital already invested in company assets. The first option is clearly the most consistent with TELRIC principles. However, its implementation is problematic, as a forward-looking capital structure cannot be observed. The second option, while not theoretically consistent with TELRIC principles, can be informative. That is, a company's past behavior with regard to raising capital may indicate how it would raise capital in the future. The third option, which Dr. Avera elected, is the worst of the three. Not only is the use of capital already invested in company assets as the basis for the capital structure inconsistent with the TELRIC principle of using marginal capital, but also, the value of a company's capital on secondary markets has no bearing on the mix of capital directly invested in assets serving customers. That is, the price at which a company's capital is trading in secondary markets does not affect the amount of money that was raised by the company to purchase its assets. For example, if $1,000 of assets were purchased using $500 of debt and $500 of equity, the book value equity ratio would be 50%. Even if the value of the equity holder's shares rose to $1,000 on the secondary market, producing a market value equity ratio of 67% and an overall market value of $1,500, there would still be only $1,000 dollars invested directly in the underlying assets serving customers. The additional $500 of market value would not go toward additional company assets, but would go to the original equity holder as a capital gain on the sale of his shares. Thus, the value of capital on the secondary market tells us nothing with regard to the mix of capital a company has raised in the past or would raise going forward.

Q. Did you use historical book values to determine your mixture of debt maturities?

A. Yes. Because we are unable to observe, and have no means to measure, the forward-looking mix of debt maturities that a facilities-based competitor would utilize, I used historical book values to determine the mixture of debt maturities. However, I did not apply an overall historical capital structure directly. As indicated above, historical capital maturity mixes can be informative, as a company's past behavior with regard to its use of capital may provide some indication of its future behavior. Thus, to determine the mix of debt maturities I used historical percentages. In contrast, my recommendations for the more critical total debt and equity ratios were based on coverage ratios, which provided an alternative measure by which to judge the forward-looking total debt and equity ratios. As I will explain, the concept of depreciation as well as Staff's recommended depreciation rates for SBCI support my selected mix of debt maturities.

Q. Dr. Avera claims that your methodology for deriving a capital structure for SBCI is "entirely inconsistent" and is in "diametric opposition" to the FCC's directive to replicate a market in which there is full competition. Please comment.

A. First, this is a prime example of the hyperbole sprinkled throughout Dr. Avera's testimony. Since my analysis assumes a moderately high level of competition, it cannot be *diametrically* opposed to any level of competition, regardless of one's interpretation of the FCC's directives. Second, as noted above, the FCC's instructions are vague regarding the level of competitive risk to assume in UNE pricing. Internal consistency among the assumptions underlying each of the

model inputs is of primary concern. Since my cost of capital reflects a level of competition consistent with that implied by the level of efficiency reflected in Staff's other inputs, my cost of capital is not inconsistent with FCC directives.

Q. Dr. Avera notes that you recognized that the old coverage ratio benchmarks for telephone utilities abandoned by S&P in 1998 no longer reflect the risk associated with the telecommunications industry and concludes that you failed to consider the implication of open, facilities-based competition for UNEs. Is his conclusion correct?

A. No. This is another of the red herrings in Dr. Avera's testimony to which I referred previously. There is simply no connection between the former S&P benchmarks and Dr. Avera's conclusion. My acknowledgement that S&P's old telephone utility benchmarks no longer reflect the risk associated with the telecommunications industry cannot logically lead one to conclude that my recommendation for SBCI's UNEs does not consider competition. As I explained in my direct testimony, UNE loop rates should reflect a level of competition somewhere between the low degree of competition of rate-regulated, exclusive franchise, utility services and the high degree of competition of unregulated industrial companies.[10] The former S&P telecom benchmarks represent the low, rate-regulated end of the competitive spectrum. However, my capital structure was not ultimately based on those benchmarks, but rather, was based on the coverage ratios of my Telecom Sample, which reflects a moderately high degree of competitive risk. The Telecom Sample coverage ratios I targeted are higher than those included in the former S&P telecom benchmarks, which indicates that my cost of capital recommendation reflects competitive risk. Moreover, the

[10] ICC Staff Exhibit 12.0, pp. 29-31.

Telecom Sample coverage ratios I targeted are closer to the Industrial median coverage ratios than to the former S&P telecom benchmarks. Dr. Avera's conclusion ignores these facts. Thus, not only are S&P's former telecommunications benchmarks irrelevant to my ultimate recommendation, but they demonstrate that, contrary to Dr. Avera's conclusion, my recommendation does reflect competitive risk.

Q. Dr. Avera claims that your capital structure is not consistent with an A rating. Please comment.

A. In response to Question 26 of his direct testimony, Dr. Avera declares that my recommended capital structure is not consistent with an A rating. The only support he provides for his response is that credit ratings reflect many considerations in addition to interest coverage ratios. This is illogical. One cannot conclude that a capital structure is inconsistent with a given rating solely because the methodology used to derive that capital structure is not as comprehensive as the debt rating process. Other than a severely flawed recitation of inapplicable capital structure ratios, which I address below, Dr. Avera has presented no evidence to indicate that other considerations that factor into credit ratings contradict the results the of the interest coverage ratios I used.

Q. Please explain how Dr. Avera misused capital structure ratios in critique of your capital structure recommendation.

A. Dr. Avera claims that S&P requires an approximately 70% equity ratio for a single-A rated industrial company.[11] In fact, he concludes that my capital

[11] SBC Illinois Exhibit 12.1, p. 22.

structure is not even consistent with an investment grade bond rating.[12] However, his argument is flawed. First, the capital structure to be used in this proceeding should not be based on industrial guidelines since industrial companies reflect full competition, while the other cost factors in both Staff's and the Company's models reflect less than full efficiency, as noted previously.

Second, the actual debt ratios for industrial companies are much higher than the corresponding guidelines Dr. Avera cites. For example, according to the 2003 edition of the same source Dr. Avera cites for capital structure guidelines, the 3-year median total debt to total capital ratio for A-rated industrials is 42.6%.[13] This implies an actual median equity ratio for A-rated industrials of approximately 57.4%,[14] as opposed to the approximately 70% Dr. Avera claims is required. The fact that actual debt levels are significantly higher than the S&P debt ratio guidelines demonstrates that those guidelines are flexible, contrary Dr. Avera's claim. Moreover, contrary to Dr. Avera's conclusion, a median equity ratio for A-rated industrials of approximately 57.4% is consistent with my 51.0% equity ratio recommendation, which targeted A/A– telecom companies, since one would expect a lower rated, partially rate-regulated company to have a lower equity ratio than the median for A-rated industrials.

Dr. Avera's assertion that my capital structure recommendation is inconsistent with Value Line's projection of a 66.7% average book value equity ratio for 2006-

[12] SBC Illinois Exhibit 12.1, p. 23.
[13] Standard& Poor's, "Corporate Ratings Criteria," 2003, p. 50. www.standardandpoors.com.
[14] In contrast, Dr. Avera claims that the implied median equity ratio for lower rated, BBB industrials is 66.2%. (SBC Illinois Exhibit 12.1, p. 23.) This appears to be mistakenly based on the median *long-term* debt ratio for *A-rated* industrials rather than the median *total* debt ratio for *BBB-rated* industrials as his testimony implies.

2008 for my Telecom Sample is also misleading. First, this claim is based on a single source's speculation of the future. Projections are prone to error; clearly projections from a single source are not infallible. In contrast, we know what recent capital structures have been. The 3-year average equity ratio for the seven companies in my Telecom Sample was 47.3%.[15] Thus, given those recent equity ratio levels, Value Line's forecast that equity ratios will jump to 66.7% in the near future is dubious. Second, Value Line projections reflect neither short-term debt nor long-term debt due within one year.[16] Thus, even if those projections are accurate, they would reflect a distorted view of the true capital structure and overstate the equity ratio. Finally, even if the Commission suspends disbelief and adopts a 66.7% equity ratio based on Value Line projections, the overall cost of capital will be overstated until such time as equity ratios rise to that level, if they ever do. Thus, the Company is seeking an excessive cost of capital on the speculation that its cost will rise – eventually. The Commission should not base rates on speculation.

Q. Dr. Avera provides several alternative capital structures that allegedly support a higher equity ratio than you recommend. Are those alternatives appropriate for use in this proceeding?

A. No. Ignoring his criticism of my analysis for being based on a single financial ratio, Dr. Avera provides several alternative capital structures based on a single ratio, the debt ratio, to determine the capital structure. As I have demonstrated, debt ratios are very imprecise measures of financial strength. Moreover, interest

[15] Standard& Poor's Ratings Direct, "Credit Stats: Adjusted Key U.S. Industrial Financial Ratios," August 8, 2003. Excluding Sprint, the 3-year average equity ratio equals 49.0%. Sprint was excluded from the interest coverage targets from which I developed my capital structure recommendation.

[16] Value Line Investment Survey, "How to Invest in Common Stocks: A Guide to Using the Value Line Investment Survey," 1995, p. 41.

coverage ratios are better measures of financial strength, since, in addition to capital structure, they incorporate the crucial determinants of a company's ability to meet its debt service obligations: earnings, cash flows, and interest costs.

I have demonstrated that capital structures based on SBC's capital structure[17] or secondary market values (see pp. 7-8) are inappropriate for use in this proceeding. In addition, I have demonstrated that S&P debt ratio guidelines are not strict requirements, but are merely very loose guidelines from which actual debt ratios for companies with corresponding ratings stray considerably (see p. 12). Moreover, I have demonstrated that the corrected median book value debt ratio for A-rated industrials of 57.4% actually supports my 51.0% equity ratio recommendation for less risky UNE loops. Finally, I have demonstrated that Value Line's 2006-2008 capital structure projections are speculative and distorted, overstate the equity ratio, and would produce an excessive cost of capital at least until such time as equity ratios rise to the level speculated, if they ever do (see p. 13). For these reasons, none of the alternative capital structures that Dr. Avera presented provide an appropriate basis for establishing the capital structure to be used in this proceeding.

Q. Dr. Avera contends that short-term debt should not be included in the capital structure because it does not match the long-term nature of UNE assets. Please comment.

A. Dr. Avera's argument suggests that we should attempt to match the maturities of the Company's assets and liabilities. It is not uncommon for companies to attempt to match the maturities of their assets and liabilities in order to reduce

[17] ICC Staff Exhibit 12.0, p. 26.

risk. But Dr. Avera's argument ignores depreciation. Depreciation is the mechanism by which the investment in an asset is recovered over the life of the asset.[18] Thus, depreciation effectively reduces the maturity of the assets. As noted in my direct testimony, Staff has calculated SBCI's UNE depreciation and amortization rate to be approximately 5.12%. Thus, approximately 5% of SBCI's UNE investment will be returned to SBCI in the form of depreciation and amortization cash flows annually. Based on Dr. Avera's argument, one would expect approximately 5% of SBCI's capital to come due within one year to match the annual recovery of SBCI's assets via depreciation and amortization. Thus, Dr. Avera's argument actually supports my inclusion of short-term debt as 4.78% of SBCI's capital structure. Overall, the weighted average maturity of the debt in my cost of capital recommendation is 11.65 years, while the average maturity of the UNE assets, based on Staff's 5.12% depreciation rate, is approximately 9.77 years. In contrast, the debt in Dr. Avera's cost of capital recommendation appears to reflect only issuances with terms to maturity of 20 years or more.

Q. What capital structure would you recommend if the ICC determined that UNE prices should reflect full competition?

A. Contrary to Dr. Avera's implications, my capital structure recommendations would not change dramatically even if I used the interest coverage ratio medians for industrials, which reflect full competition, rather than those of the Telecom Sample, which reflects a moderately high level of competition. A capital structure consisting of 4.68% short-term debt, 43.32% long-term debt, and 52.00% equity produced interest coverage ratios consistent with those of an industrial company

[18] *Report and Order and Order on Remand and Further Notice of Proposed Rulemaking*, ¶671, In re Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers, FCC 03-36, CC Docket 01-0338 (rel. Aug. 21, 2003) ("Triennial Review Order"

with an A/A– rating. That the use of industrial medians would cause such a small change in capital structure indicates that the Telecom Sample is not significantly less risky than the industrial median.

Cost of Long-term Debt

Q. Dr. Avera contends that the maturity of SBCI's long-term debt should match the long-term nature of UNE assets. Do you agree?

A. For the reasons discussed previously with regard to short-term debt, SBCI's long-term debt should include a variety of maturities rather than a single long-term maturity.

Q. Dr. Avera claims that current long-term debt costs understate forward-looking costs investors anticipate. Please comment.

A. Dr. Avera contends that my cost of debt proposal is too low and notes that 10-year interest rates had risen, as of November and December of 2003, from the time of my analysis. However, interest rates are currently very near the same levels they were at the time of my analysis; if anything, interest rates have fallen slightly overall. For example, 90-day Treasury bills have fallen from a 1.09% yield on April 3, 2003 to a 0.92% yield on February 3, 2004, 10-year Treasury bonds have risen slightly from a 3.93% yield on April 3, 2003 to a 4.13% yield on February 3, 2004, and long-term Treasury bonds have fallen very slightly from 5.08% yield on April 3, 2003 to 5.06% yield on February 3, 2004.[19] In addition, the interest rate on 25/30-year A-rated Industrial debt has fallen from 5.98% on

[19] The Federal Reserve Board, *Federal Reserve Statistical Release: Selected Interest Rates, H.15 Daily Update*, www.federalreserve.gov/releases/H15/update/, April 4, 2003 and February 4, 2004.

March 20, 2003 to 5.73% on February 5, 2004.[20] Finally, the spread on 10-year A-rated Industrial bonds has fallen from about 110 basis points on April 7, 2003 to 85 basis points on February 17, 2004.[21]

Dr. Avera's support for his 7.18% cost of debt proposal rests on speculation with regard to interest rates five to ten years in the future. Dr. Avera seems to suggest that interest rates have nowhere to go but up. However, that suggestion has already been proven false, as interest rates have fallen slightly since the time of my analysis, as noted above. No one can forecast when, or even if, interest rates will rise and remain consistently above the rates I recommended. Nevertheless, Dr. Avera proposes a cost of long-term debt more than two percentage points higher my cost of debt recommendation, which is based on current rates. Thus, the Company is again seeking to charge a rate in excess of its current cost on the speculation that its cost will eventually rise. As noted previously, the Commission should not base rates on speculation.

[20] The Value Line Investment Survey, Selection & Opinion, March 28, 2003, p. 3055, and February 13, 2004, p. 2495.
[21] "Reuters Corporate Spreads for Industrials," February 17, 2004. www.bondsonline.com.

Cost of Equity

Q. Dr. Avera criticizes your DCF cost of equity estimate, noting that the individual estimates for four of the seven companies in your Telecom Sample are less than 10% and noting that authorized rates of return on gas and electric utilities were 11.37% and 11.38%, respectively, in the first half of 2003. Is that a reasonable criticism?

A. No. First, my cost of equity recommendation is based on the average cost of equity results for a sample of seven companies; it is not based on the estimate from any single company. I used a sample in order to minimize measurement error. Due to measurement error, individual cost of equity estimates can misstate the cost of equity. Individual estimates can overestimate of the cost of equity as well as underestimate it. Estimates for a sample as a whole, however, are subject to less measurement error than individual company estimates, as high and low measurement errors in individual estimates are likely to offset each other. Removing only the lowest individual estimates from the sample while retaining the highest individual estimates, as Dr. Avera proposes, distorts the results of the sample overall and skews the average upward. While this serves Dr. Avera's purpose of obtaining a higher average cost of equity estimate, it defeats the purpose of using a sample.

Second, my cost of equity recommendation is based on the average cost of equity results produced by my DCF and CAPM analyses. I used two distinct models to estimate the cost of equity for reasons similar to those for using a sample of companies. Either model may tend to produce higher or lower estimates depending on the prevailing economic conditions. The use of two

models moderates such variances. Thus, individual results within my cost of equity analysis should not be analyzed in isolation, for it is the reasonableness of the overall analysis that matters. As noted in my direct testimony, my ultimate cost of equity recommendation was 12.44%, which is significantly higher than the 11.37% and 11.38% average equity returns authorized for gas and electric utilities, respectively, in 2003. Nevertheless, it should be noted that the ICC is not bound by the returns authorized by other jurisdictions. Thus, the average equity returns authorized by various bodies of authority for gas and electric utilities in 2003 are not relevant to this proceeding. Moreover, Dr. Avera has not demonstrated the risk level of the companies included in those average authorized equity returns. Thus, we cannot reasonably compare their rates of return to those in this proceeding.

Q. Dr. Avera concludes that your DCF cost of equity results are too low, based on Value Line estimates of equity returns for the companies in your Telecom Sample. Please comment.

A. First, this argument again ignores the fact that my cost of equity recommendation was not based on the results of a single company nor a single model. Second, the Value Line equity return estimates he cites are not long-term required rates of return on equity, but rather, are expected holding period returns based on a projection of the future stock prices of those seven companies over an approximately five-year horizon. The Value Line analysis does not indicate how the terminal values of the stocks were estimated. We know that those stock prices are a result of some combination of the expected growth rates and the required rate of return beyond the five-year horizon. Thus, the projected stock prices in that analysis could have risen from their current values due to

expectations of higher growth beyond five years, as Dr. Avera suggests, or could be due to an expectation of falling required returns. We cannot say with any certainty which factor dominates, since Value Line does not provide any indication of its expectations for growth rates or return requirements beyond five years. However, for the reasons explained on pages 36-37 of my direct testimony, contrary to Dr. Avera's contention, it is more reasonable to believe that the stock prices in the Value Line analysis were projected to rise from their current values due to an expectation of falling required returns rather than expectations of higher growth beyond five years.

Q. Dr. Avera claims that 5-year growth rates for the Telecom industry reflect a near-term slump in the industry and understate investors' long-run growth expectations for the industry. Do you agree?

A. No. As explained on pages 36-37 of my direct testimony, current growth rate estimates for the Telecom industry are not depressed, but rather have merely returned to more reasonable levels after a period of unusually high growth expectations. Mathematically, the long-term growth rate for an individual company cannot exceed the growth rate for the overall economy indefinitely or that company will eventually grow to become the economy. Since the five-year growth rates I employed are actually slightly above the long-run growth rate expectations for the overall economy, the higher growth rates Dr. Avera espouses would clearly be unsustainable.

Furthermore, this argument stands in contrast to Dr. Avera's argument that the introduction of competition has dramatically increased SBCI's risk and will continue to do so into the foreseeable future. To justify a higher cost of capital,

Dr. Avera argues at length that SBCI's risk has increased due to the loss, and continuing threat of futures losses, of local customers to competitors. Indeed, in lamenting SBC's inability to make up for UNE-based losses, Dr. Avera quotes a *Wall Street Journal* article that suggests it would take approximately 5 new long-distance customers to replace a single lost local customer.[22] At the same time, he argues that we should expect the growth rate of LECs such as SBCI to outpace that of the overall economy beyond five years. Those two arguments are not consistent.

Q. Dr. Avera claims that when computing the "b x r" growth rate, "the correct 'r' value to be used in estimating investors' growth expectations reflects the return on all investment, not just on new investments…."[23] Is he correct?

A. No. The "b x r" growth rate is a measure of sustainable earnings growth. The theoretically correct "r" value is the rate of return on new investment only. Capacity constraints render growth from existing investment unsustainable. A simple review of the "b x r" formula demonstrates the rate of return on new investment to be the correct rate of return. The "b" factor to which the rate of return is applied is retained earnings. Retained earnings are earnings the company plows back into *new investment*. The sustainable growth is the return the company is expected to earn on the reinvestment of those retained earnings. Thus, the correct "r" value to apply to the "b" factor is the rate of return on new

[22] SBC Illinois Exhibit 12.1, pp. 50-51.
[23] SBC Illinois Exhibit 12.1, pp. 14.

investment. The following passage from an investments textbook by Bodie, Kane, and Marcus clearly reinforces this point:[24]

> How do stock analysts derive forecasts of g, the expected growth rate of dividends? ….They try to relate the expected growth rate of earnings to the expected profitability of the firm's *future* investment opportunities.
>
> The exact relationship is
>
> $$g = b \times ROE \qquad (17.2)$$
>
> where b is the proportion of the firm's earnings that is reinvested in the business, called the plowback ratio or the earnings retention ratio, and ROE is the rate of return (return on equity) on new investment.

A footnote to that excerpt clarifies that "The appropriate measure of ROE in equation 17.2 is really the internal rate of return (IRR) on the firm's future investments of equity capital."

The use of the return on all investment in a "b x r" growth rate calculation would serve only as an approximation for the return on new investment. Thus, the return on all investment would only reflect the correct return by coincidence. By using the return on all investment, Dr. Avera implicitly assumes that the return on existing equity that he used is equal to the return on new equity investment. Dr. Avera did not prove that assumption to be valid.

Q. Dr. Avera claims that there is no basis for your argument that projected growth rates must only be used in conjunction with projected dividend

[24] Bodie, Kane, and Marcus, Investments, 478 (1989 ed.)

yields and claims that you combined current dividends yield with projected growth rates to estimate the cost of equity. Is he correct?

A. No. Dr. Avera is incorrect in both of those claims. The procedures he and I used are not comparable. The difference in timing between the growth rates I used and those that he used is significant. The growth rates I used reflect the anticipated forward-looking growth as of the time of my analysis. In contrast, the projected growth rates he used allegedly reflect Value Line's expectations of growth beginning three to five years from the time of his updated analysis. Thus, unlike my analysis, which matches concurrent dividend yields and growth expectations as of April 2003, Dr. Avera's analysis mismatches 2002 dividend yields with growth rate projections for 2005 and beyond. That is a violation of valuation principles.

Dividend yields affect growth rate expectations because, as noted above, a company's sustainable growth is based on its return on new investment; and the level of new investment is influenced by the company's dividend payout ratio. All else equal, as dividend payout ratios decline, dividend yields decline and growth rates rise. To illustrate, investors in a company with a current dividend payout ratio of 100% of its earnings will receive their maximum dividend yield; but the company will have no retained earnings to plow back into new investment to create growth. If that same company is expected to reduce its dividend payout ratio at some point in the future, its investors' dividend yield will fall at that time; however, the company's contemporaneous growth expectations will rise due to the increased retained earnings. Thus, to mismatch the growth rate expectations beginning three to five years in the future with the current dividend yield will overstate the cost of capital for a company with falling dividend yield

expectations. That is precisely what Dr. Avera's did, as the Value Line forecasted 2005-2007 dividend yield for each of the four companies in Dr. Avera's sample is significantly lower than the corresponding 2002 dividend yield. Combining Dr. Avera's growth rate estimates based on 2005-2007 projections, which, as previously explained, are flawed, with Value Line's 2005-2007 dividend yield projections produces a cost of equity of 12.2% That is a full two percentage points below the 14.2% estimate he derived. Thus, Dr. Avera's implementation of discounted cash flow model significantly overstates the cost of equity.

Q. Dr. Avera argues that the differences between the results of Harris and Marston's 1992 and 2001 risk premium studies does not render them inappropriate for use in establishing the cost of equity. Do you agree?

A. Dr. Avera defends his use of the Harris and Marston risk premium, suggesting that one should expect two risk premium studies covering different time periods to produce differing results due the fact that equity risk premiums are unobservable. He also argues that the equity risk premiums resulting from the two studies are not significantly different. However, the magnitude of the change is not the issue. The problem is that the historical average risk premium Dr. Avera used would only reflect the current risk premium by coincidence; the current risk premium could be higher or lower. Furthermore, the use of a historical average risk premium suggests that risk premiums revert to a single true mean; however, Dr. Avera has not established that to be true. Moreover, even if risk premiums do revert to a single true mean, he has demonstrated neither what the true mean is nor that the equity risk premium he applied reflects the true mean.

Q. Does this conclude your direct testimony?

A. Yes, it does.